



02-CV-02505-ANS

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

CENTER FOR BIOLOGICAL
DIVERSITY, *et al.*,

Plaintiffs,

v.

ROBERT LOHN, *et al.*,

Defendants.

Case No. C02-2505L

ORDER REGARDING CROSS
MOTIONS FOR SUMMARY
JUDGMENT

I. INTRODUCTION

This matter comes before the Court on a motion for summary judgment (Dkt. # 29) filed by plaintiffs Center for Biological Diversity, *et al.* (collectively, "Plaintiffs") and a cross motion for summary judgment (Dkt. # 41) filed by defendants Robert Lohn, *et al.* (collectively "Defendants" or "NMFS"). Plaintiffs brought this action to challenge the National Marine Fisheries Service's ("NMFS") determination that the "Southern Resident" orca whales of the Puget Sound, the Strait of Juan de Fuca, and the Georgia Strait do not warrant listing under the Endangered Species Act ("ESA"). Plaintiffs contend that Defendants made this determination based upon a factor that is not permitted

1 by the ESA, that Defendants failed to protect the only resident orca population indigenous
2 to the contiguous United States, and that Defendants relied upon a definition of the orca
3 species that falls below the best available scientific information standard. For the reasons
4 set forth in this Order, the Court grants in part and denies in part both motions, sets aside
5 Defendants' "not warranted" finding, and remands this matter to NMFS for re-
6 determination of whether the Southern Residents should be listed pursuant to the ESA.

7 **II. BACKGROUND**

8 **A. The Killer Whale (*Orcinus Orca*).**

9 Killer whales ("orcas") are among the world's most recognized and beloved
10 marine mammals. In recent years public concern for orca whales has increased
11 dramatically, and today many individuals and organizations, some of which are plaintiffs
12 in this lawsuit, work to protect these magnificent animals.¹

13 Orcas live in matriarchal units, which congregate with other units to form pods,
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16 ¹Within the past century commercial fishermen regularly shot orcas, perceiving
17 them as competitors for fish, and both the Canadian and United States military forces
18 reportedly used orcas for target practice. See M.L. Lyke, Toxin Threatens a Wonder of
19 the Northwest, Washington Post, Nov. 8, 1999, at A9; Eric Sorensen, Orca Makeover:
20 'Killer' to Icon, Seattle Times, Jan. 6, 2003, at A1; but see AR 6 at 44 (noting that some
21 authorities state that the Royal Canadian Air Force bombed or strafed orcas in British
22 Columbia and noting that the United States Air Force dropped depth charges on orcas in
23 Icelandic waters, but concluding that "no evidence can be found of military bombing or
24 strafing of killer whales in British Columbia and Washington"). Today's public adoration
25 of and concern for this Pacific Northwest icon stands in striking contrast to past disdain
26 for the creature. This adoration and concern is evident in the highly publicized
reunification of the orphaned "Springer" with her pod and similar anticipated efforts to
reunite "Luna" with his pod. See Robert McClure, Capture Goes Smoothly; a Lasso, a
Sling, and a Barge Used to Move Orca to Pen, Seattle Post-Intelligencer, June 14, 2002,
at A1; Kathy George, U.S. Finds Money for Luna Reunion, Seattle Post-Intelligencer,
October 27, 2003, at B1.

1 which in turn congregate to form populations. (AR 6 at 17).² Each orca population
2 communicates using one or more unique dialects of clicks, calls, and whistles. *Id.* at xii,
3 52, 62. Many scientists believe that orcas possess “culture” and generationally transfer
4 that culture based upon “(1) their long life-span and extended childhood learning periods .
5 . . . relative to other mammals that possess culture . . . , (2) their advanced central nervous
6 system relative to other mammals that possess culture . . . and (3) their complex learned
7 communication system.” (AR 313 (Richard W. Osborne, A Historical Ecology of Salish
8 Sea “Resident” Killer Whales (*Orcinus orca*): With Implications for Management (1999)
9 (unpublished Ph.D. dissertation, University of Victoria)) at 27-28 (internal citations
10 omitted)).

11 Taxonomists recognize only one global species of orca whales, the *Orcinus orca*.
12 (Complaint (Dkt. # 1) ¶ 24; Answer (Dkt. # 20) ¶ 24). This classification was established
13 by Carl Linnaeus, “the father of taxonomy,” in 1758. (Plaintiffs’ Reply and Response at
14 11 (citing AR 330 at 118)). However, biologists classify orcas that are present in the
15 Eastern North Pacific Ocean into three reproductively isolated forms: resident, transient,
16 and offshore. (AR 6 at 13). “The three forms vary in morphology, ecology, behavior,
17 and genetic characteristics.” *Id.* “Resident killer whales in the Eastern North Pacific are
18 noticeably different from both the Transient and Offshore forms.” *Id.* The dorsal fin of
19 resident orcas is rounded at the tip, and resident orcas primarily prey upon fish. *Id.* Four
20 resident orca populations exist in the Eastern North Pacific Ocean: the Southern
21 Residents, the Northern Residents, and two groups of Alaska Residents. The Southern

23 ²Citations to the Administrative Record in this matter are abbreviated as “AR,”
24 followed by the tab and page numbers. The Supplemental Administrative Record is cited
25 as “SAR,” while the Joint Distinct Population Segment Administrative Record is cited as
“DPS AR.”

1 Residents, consisting of three pods, reside in the inland waterways of Puget Sound, the
2 Strait of Juan de Fuca, and the Georgia Strait during the spring, summer, and fall. Id. at
3 14. The Northern Residents, consisting of approximately sixteen pods, range from the
4 Georgia Strait to Southeastern Alaska. Id. Although there is some overlap in the ranges
5 of the Southern and Northern Residents, Southern Residents appear not to associate with
6 other resident orcas, and genetic studies suggest that the stocks of the Southern and
7 Northern Residents are reproductively isolated from one another. Id.

8 Transient orcas differ from residents in several respects. Dorsal fins of transient
9 orcas are more erect and pointed than the dorsal fins of resident orcas. Id. at 15.

10 Transients congregate in smaller pods than residents and, in contrast to residents,
11 transients prey primarily upon other marine mammals, such as seals, porpoises, and
12 whales. Id. Transients travel long distances in pursuit of their prey. Id. Although the
13 transients' geographical range overlaps with that of both resident and offshore orcas,
14 transients do not intermingle with resident or offshore orcas, and significant genetic
15 differences exist between and among the three forms. Id.

16 "Offshore killer whales are poorly understood." Id. Offshore orcas are
17 morphologically similar to residents and appear to range from central coastal Mexico to
18 Alaska, in both coastal and offshore waters. Id. Offshore orcas do not intermingle with
19 residents or transients, and genetic data suggest the form is reproductively isolated from
20 the other forms. Id.

21 **B. The Decline of the Southern Residents.**

22 Fewer Southern Residents inhabit their historic range today than a century ago.
23 Plaintiffs suggest that the population of Southern Residents likely once numbered
24 between 140 and 200. (Plaintiffs' Motion at 5); see also AR 6 at 52 ("Given the
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1 speculative nature of some of this information [upon which analysis of past populations is
2 based], it is difficult to make conclusive statements about the past abundance of Southern
3 Residents and what the current or past carrying capacity have been. However, several
4 lines of evidence indicate that population sizes in the past may have been larger.”). Three
5 major population declines have occurred since the mid-1960s.

6 During the 1960s and early 1970s, “at least 68 [Southern and Northern Resident]
7 whales were removed or killed during capture operations for public display.” (AR 6 at
8 43). As a result of a shortage of reproductive females due to those capture operations, the
9 Southern Resident population declined by approximately twelve percent between 1980
10 and 1984. Id. at 31. The population then grew and stabilized as more female orcas
11 became reproductively mature. (Complaint ¶ 35; Answer ¶ 35). In recent years the
12 population of Southern Residents has declined precipitously. Between 1996 and 2001,
13 the Southern Resident population declined by twenty percent from 97 whales to 78
14 whales. (AR 6 at vii, 31). Scientists are uncertain of the cause of this most recent
15 decline, but suspect external causes, such as the availability of prey or the presence of
16 pollution, rather than demographic changes or mere fluctuations in year-to-year survival.
17 Id. at 33-34.

18 **C. Plaintiffs’ Petition for ESA Protection of the Southern Residents.**

19 Congress enacted the ESA “to provide a means whereby the ecosystems upon
20 which endangered and threatened species depend may be conserved [and] to provide a
21 program for the conservation of such endangered species and threatened species.” 16
22 U.S.C. § 1531(b). An “endangered species” is a species that is “in danger of extinction
23 throughout all or a significant portion of its range.” 16 U.S.C. § 1532(6). A “threatened
24 species” is a species that is “likely to become an endangered species within the
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1 foreseeable future throughout all or a significant portion of its range.” 16 U.S.C. §
2 1532(20). A “species” includes “any subspecies of fish or wildlife or plants, and any
3 distinct population segment of any species of vertebrate fish or wildlife which interbreeds
4 when mature.” 16 U.S.C. § 1532(16).

5 The ESA does not define “distinct population segment” (“DPS”). However, in
6 1996 NMFS and the Fish and Wildlife Service (“FWS”) (collectively, “the Services”)
7 published a joint policy (the “DPS Policy”) clarifying their interpretation of that term.
8 See 61 Fed. Reg. 4722 (Feb. 7, 1996). The DPS Policy requires the Services to evaluate
9 three elements when considering identification of a DPS:

- 10 (1) Discreteness of the population segment in relation to the remainder of the
11 species to which it belongs;
- 12 (2) The significance of the population segment to the species to which it
13 belongs; and
- 14 (3) The population segment’s conservation status in relation to the Act’s
standards for listing (i.e., is the population segment, when treated as
if it were a species, endangered or threatened?).

15 Id. at 4725.

16 NMFS determines whether to list a species as threatened or endangered whenever
17 any one of the following factors is met:

- 18 (1) the present or threatened destruction, modification, curtailment of its habitat
19 or range;
- 20 (2) overutilization for commercial, recreational, scientific, or educational
purposes;
- 21 (3) disease or predation;
- 22 (4) the inadequacy of existing regulatory mechanisms; or
- 23 (5) other natural or manmade factors affecting its continued existence.

24 16 U.S.C. § 1533(a)(1). Once a species is listed, various protections of both members of
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1 the species and the species' critical habitat are engaged. See 16 U.S.C. §§ 1536, 1538.

2 The ESA provides that interested persons may petition to add a species to, or
3 remove a species from, the endangered or threatened species lists. 16 U.S.C. §
4 1533(b)(3)(A). "To the maximum extent practicable, within 90 days after receiving" such
5 a petition, NMFS must determine "whether the petition presents substantial scientific or
6 commercial information indicating that the petitioned action may be warranted." Id. If
7 NMFS determines that the petitioners have made such a showing, NMFS must
8 immediately review the status of the species and make a determination of whether listing
9 is warranted within twelve months of receipt of the petition. 16 U.S.C. § 1533(b)(3)(B).

10 In May of 2001, Plaintiffs and others petitioned NMFS to list the Southern
11 Resident orcas as endangered pursuant to the ESA. (AR 34). On August 13, 2001,
12 NMFS issued a finding that listing the Southern Residents may be warranted. (AR 7; 66
13 Fed. Reg. 42,499 (Aug. 13, 2001)). NMFS then convened a biological review team (the
14 "BRT") to conduct a status review of the Southern Residents. (Complaint ¶ 39; Answer ¶
15 39). The BRT was composed of eleven NMFS scientists with expertise in conservation
16 biology, genetics, risk assessment, risk modeling, toxicology, and contaminants. See AR
17 6 at 1 n.1. On April 16, 2002, the BRT forwarded its Report on the Status Review of the
18 Southern Residents to NMFS decision-makers. See AR 5. NMFS considered the BRT's
19 report and conclusions, and on July 1, 2002, published a final determination regarding
20 whether the Southern Residents should be listed. NMFS concluded that because the
21 Southern Residents do not meet the "significance" criterion of the DPS Policy, ESA
22 listing is not warranted.³ 67 Fed. Reg. 44,133, 44,136-38 (July 1, 2002).

24 ³At the time NMFS issued the "not warranted" determination, the agency indicated
25 its intent to conduct a status review to determine whether the Southern Resident stock

1 Plaintiffs filed this action on December 18, 2002.

2 III. DISCUSSION

3 A. Administrative Procedure Act Standard.

4 Defendants' final agency actions made pursuant to the ESA are reviewed in
5 accordance with the APA. Friends of Endangered Species, Inc. v. Jantzen, 760 F.2d 976,
6 981-82 (9th Cir. 1985).

7 A court may disturb an agency's final action only if that final action is "arbitrary,
8 capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. §
9 706(2)(A). This standard is "highly deferential, presuming agency action to be valid and
10 affirming the agency action if a reasonable basis exists for its decision." Independent
11 Acceptance Co. v. California, 204 F.3d 1247, 1251 (9th Cir. 2000). A reviewing court
12 must not "substitute its judgment for that of the agency" concerning the proposed action.
13 Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402, 416 (1971). Rather, a court
14 must determine whether the decision was "based on a consideration of relevant factors."
15 Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1211 (9th Cir. 1998).
16 The standard does not shield the agency from a "thorough, probing, in-depth review."
17 Seattle Audubon Soc'y v. Moseley, 798 F. Supp. 1473, 1476 (W.D. Wash. 1992) (quoting
18 Citizens to Preserve Overton Park, 401 U.S. at 415).

19 An agency seeking to justify its action may not offer a new explanation for the
20 action, but must be judged on the rationale and record that led to the decision. City of

21 _____
22 should be identified as "depleted" under the Marine Mammal Protection Act (the
23 "MMPA"). Less than one year later NMFS published a final rule designating the
24 Southern Residents as depleted under the MMPA. 68 Fed. Reg. 31,980 (May 29, 2003).
25 NMFS also announced that, pursuant to the MMPA, it would prepare a conservation plan
26 to reverse the Southern Residents' decline and to promote the population's recovery. Id.
at 31,982.

1 Kansas City, Missouri v. Department of Hous. & Urban Dev., 923 F.2d 188, 192 (D.C.
2 Cir. 1991) (“arbitrary and capricious review . . . demands evidence of reasoned
3 decisionmaking at the agency level; agency rationales developed for the first time during
4 litigation do not serve as adequate substitutes”).

5 “Summary judgment is an appropriate procedure for resolving a challenge to a
6 federal agency’s administrative decision when review is based upon the administrative
7 record, even though the court does not employ the standard of review set forth in Rule
8 56.” Maine v. Norton, 257 F. Supp. 2d 357, 363 (D. Me. 2003) (citing Florida Power &
9 Light Co. v. Lorion, 470 U.S. 729, 743-44 (1985)).

10 **B. Was Defendants’ Determination that the Southern Residents Should not be**
11 **Listed Arbitrary, Capricious, an Abuse of Discretion, or Otherwise Not in**
12 **Accordance with the Law?**

13 **1. Key BRT Findings and NMFS Conclusions.**

14 The BRT conducted its status review of the Southern Resident orcas in light of the
15 Services’ DPS Policy. That policy requires NMFS to consider the discreteness of the
16 population in relation to the remainder of the species, the significance of the population to
17 the species to which it belongs, and the population’s conservation status. 61 Fed. Reg.
18 4722, 4725 (Feb. 7, 1996).

19 **a. Discrete Population.**

20 The BRT “unanimously concluded that the Southern Resident killer whales are
21 discrete from other killer whale populations.” (AR 6 at 59). In making this
22 determination, the BRT relied upon genetic data that show that resident, transient and
23 offshore orcas display “significant genetic differences” between each form and that there
24 is no evidence of intermixing between the Southern Resident and Northern Resident
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1 populations. See id. at 14-15, 22-23, 53, 56-58. The BRT also relied upon differences in
2 the summer ranges of the various forms and populations of orcas. See id. at 28, 59.

3 NMFS concluded that the Southern Residents are a discrete population based upon
4 the BRT's findings regarding genetic data and other relevant information. 67 Fed. Reg. at
5 44,136.

6 **b. Conservation Status.**

7 The BRT calculated a range of outcomes for the Southern Resident population.
8 Using the average mortality rate since 1974, the BRT calculated an extinction probability
9 of 1-5% in 100 years and 5-50% in 300 years for the Southern Residents. Using the
10 average mortality rate for 1992-2001, the BRT calculated a 12-30% probability of
11 extinction in 100 years and an 86-98% probability of extinction in 300 years. Id. at xiv,
12 71. The BRT observed that the Services have not established quantitative thresholds for
13 extinction risk. Id. at 77. However, a group of scientists convened by NMFS recently
14 recommended that a 1% probability of extinction in 100 years could meet the
15 "conservation status" element of the DPS Policy for purposes of defining a species or
16 population as endangered. Id.

17 In its "not warranted" determination, NMFS acknowledged that the Southern
18 Residents "face a relatively high risk of extinction." 67 Fed. Reg. at 44,137.

19 **c. Significance of Population.**

20 The "significance" element of the DPS Policy requires inquiry into the importance
21 of the population to the taxon to which it belongs.⁴ 61 Fed. Reg. at 4725. When making
22 this determination the Services consider:

24 ⁴A "taxon" is a unit of classification of animals or organisms, such as a species, a
25 genus, or a family.

1 (1) Persistence of the discrete population segment in an ecological setting
2 unusual or unique for the taxon, (2) Evidence that loss of the discrete
3 population segment would result in a significant gap in the range of the
4 taxon, (3) Evidence that the discrete population segment represents the only
5 surviving natural occurrence of a taxon that may be more abundant
6 elsewhere as an introduced population outside its historic range, or (4)
7 Evidence that the discrete population segment differs markedly from other
8 populations of the species in its genetic characteristics.

9 Id. The DPS Policy also provides that “[b]ecause precise circumstances are likely to vary
10 from case to case, it is not possible to describe prospectively all the classes of information
11 that might bear on the biological and ecological importance of a discrete population
12 segment.” Id. A population’s significance is “considered in light of Congressional
13 guidance . . . that the authority to list DPS’s be used ‘. . . sparingly’ while encouraging the
14 conservation of genetic diversity.” Id. (internal citation omitted).

15 Determination of whether a population is significant for purposes of the DPS
16 Policy requires reference to the species to which the population belongs. As noted *supra*,
17 taxonomists recognize only one global species of orca whales, the *Orcinus orca*.
18 (Complaint (Dkt. # 1) ¶ 24; Answer (Dkt. # 20) ¶ 24). However, the BRT recognized that
19 the orca taxonomy is outdated and inaccurate. The BRT concluded that “there are
20 unrecognized species or subspecies of killer whales within the currently recognized
21 taxon.” (AR 6 at 66). The BRT therefore “concluded that the current designation of one
22 global species for killer whales is likely inaccurate, because available data suggest that
23 additional species/subspecies of killer whales probably exist.”⁵ Id. at x; see also SAR 22

24 ⁵For example, two Russian scientists have proposed that certain killer whales
25 living near Antarctica be classified as the *Orcinus glacialis* (killer whale of the ice). See
26 AR 330 at 53; AR 68. The proposed *Orcinus glacialis* whales exhibit significant
differences from other killer whales, such as a smaller size, differences in skeletal
proportions, and a diet of fish. (AR 68; AR 69). However, the *Orcinus glacialis* is not
recognized by taxonomists as a species or subspecies separate from the *Orcinus orca*.

1 (the single global species of killer whales does not “accurately reflect the biology of the
2 species”). The BRT noted that the current taxon’s inadequacies linger because “formal
3 taxonomic changes are often slow to occur and lag behind current knowledge.” Id.
4 Additionally, the BRT unanimously concluded that “[b]ased on ecology, morphology and
5 genetics, . . . transient and resident killer whales in the North Pacific belong to two
6 different taxa.” (SAR 23).

7 Despite the BRT’s conclusion that the global taxon is likely inadequate, BRT
8 members did not agree upon the proper delineation of a new taxon to which the Southern
9 Residents belong. See SAR 23 at 2. Four of five possibilities for a new taxon received
10 approximately equal support from the BRT members. Id. The highest degree of support
11 for finding that the Southern Residents would meet the DPS Policy’s significance element
12 was present when the new taxon was assumed to consist of North Pacific Residents. See
13 AR 6 at 63-64. However, the BRT recognized that “[d]eciding whether the differences
14 between Residents and Transients are substantial enough to identify each ecotype as
15 different species is likely to be at least as controversial as the [yet unresolved] question of
16 how many species of killer whales are found in the Antarctic.” Id. at 54. The BRT
17 concluded that “[f]urther clarification is needed by taxonomists.” Id.

18 The BRT ultimately “concluded that the Southern Resident killer whales are not a
19 DPS of the currently recognized global species taxon.” Based upon this determination,
20 NMFS found that the Southern Residents did not meet the significance element of the
21 DPS Policy:

22 NMFS recognized that taxonomists may be conservative or liberal in
23 assigning new species and that the relevance of new information may be
24 debated widely before it is generally accepted by the scientific community.
25 Because the recent information related to the taxonomy of killer whales has
not been subjected to that scientific debate, NMFS considers the published
standard of a single, global species as the best available scientific

1 information. In accordance with the report of the BRT, NMFS finds that
2 Southern Resident killer whales are not a "species" under the ESA.

3 67 Fed. Reg. at 44,138. NMFS therefore found that listing the Southern Residents as
4 threatened or endangered pursuant to the ESA is not presently warranted. Id.

5 **2. Did NMFS Deny Southern Residents ESA Protection Based Upon an**
6 **Impermissible Factor?**

7 Plaintiffs contend that NMFS's decision not to list Southern Resident orcas as an
8 endangered species under the ESA is contrary to law because NMFS considered a
9 factor—the population's "significance"—not permitted by the ESA.

10 As noted, *supra*, the BRT concluded and NMFS found that the Southern Residents
11 compose a discrete population of killer whales. See AR 6 at 59; 67 Fed. Reg. at 44,135-
12 36. Additionally, the BRT recognized significant probabilities of extinction of the
13 Southern Resident orcas given various assumptions. See AR 6 at xiv, 71. NMFS
14 concluded that the Southern Residents "face a relatively high risk of extinction." 67 Fed.
15 Reg. at 44,137. Plaintiffs contend that NMFS's inquiry regarding the Southern Residents
16 should have ended there: "Because 'discrete' is synonomous [sic, synonymous] with
17 'distinct,' once NMFS determined that Southern Resident orca whales are a 'discrete'
18 population at risk of extinction, it had a nondiscretionary duty to list the Southern
19 Residents as endangered." (Plaintiffs' Motion at 16-17)

20 Plaintiffs note that Congress amended the ESA in 1978 to provide greater
21 flexibility to protect populations of fish and wildlife. The original ESA authorized listing
22 of species, subspecies, and "smaller taxa in common spatial arrangement that interbreed
23 when mature." Pub. L. No. 93-205, § 3(11), 87 Stat. 884 (1973). However, the 1978
24 amendment replaced the "smaller taxa" definition with the DPS concept. See 16 U.S.C.
25 1532(16) ("species" includes "any subspecies of fish or wildlife or plants, and any distinct

1 population segment of vertebrate fish or wildlife which interbreeds when mature"). The
2 ESA does not define "distinct population segment" and there is no accepted scientific
3 meaning of that term. See Plaintiffs' Motion at 17-18 (citing Southwest Ctr. for
4 Biological Diversity v. Babbitt, 926 F. Supp. 920, 926 (D. Ariz. 1996); Southwest Ctr. for
5 Biological Diversity v. Babbitt, 980 F. Supp. 1080, 1084 (D. Ariz. 1997) (DPS "appears
6 nowhere in taxonomic science or literature"); 61 Fed. Reg. at 4722).

7 In addition to requiring that a population be discrete, which Plaintiffs admit "is
8 consistent with the ESA's language," the DPS Policy requires a population to be
9 "significant" to qualify for listing. (Plaintiffs' Motion at 19). Plaintiffs contend that the
10 "significance" factor adds a listing criterion that Congress did not intend NMFS to
11 consider. Id. An agency may not make a decision or enact a policy setting forth criteria
12 for decisions that is based upon a factor Congress did not intend the agency to consider.
13 Motor Vehicles Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983).
14 However, "administrative implementation of a particular statutory provision qualifies for
15 Chevron deference when it appears that Congress delegated authority to the agency
16 generally to make rules carrying the force of law, and that the agency interpretation
17 claiming deference was promulgated in the exercise of that authority." United States v.
18 Mead Corp., 533 U.S. 218, 226-27 (2001) (citing Chevron U.S.A., Inc. v. Natural Res.
19 Def. Council, 467 U.S. 837 (1984)).

20 Congress delegated authority to the Services to establish criteria for listing species.
21 16 U.S.C. § 1533(h)(2). Pursuant to that authority the Services promulgated the DPS
22 Policy.⁶ See, e.g., 59 Fed. Reg. 65,884 (Dec. 21, 1994) (notice of draft policy and request
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24 ⁶Plaintiffs do not argue that deference is not warranted for failure to promulgate
25 the DPS Policy by appropriate notice and comment procedures. See Bonnichsen v.

1 for public comment). Therefore, the Court must grant the Services considerable
2 deference regarding the DPS Policy and uphold the policy if it is a reasonable
3 interpretation of "distinct population segment."⁷ Chevron, 467 U.S. at 842-45.

4 In support of their argument that NMFS may not consider the significance of a
5 population in a DPS inquiry and that the policy is not entitled to Chevron deference,
6 Plaintiffs cite several statements by NMFS scientists offered in the DPS Policy rule-
7 making proceedings.⁸ See Plaintiffs' Motion at 20. Additionally, Plaintiffs note that
8 "significant" is used elsewhere in ESA definitions and that congressional use of that term
9 "demonstrates that Congress knew how to specify when significance should play a role."
10 Id. at 21. For example, the Act defines "endangered species" as "any species which is in
11 danger of extinction throughout all or a *significant* portion of its range." 16 U.S.C. §
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13 United States, 217 F. Supp. 2d 1116, 1159 (D. Or. 2002) (agency's failure to comply with
14 notice and comment procedures eliminates deference to agency interpretation); see also
15 Maine v. Norton, 257 F. Supp. 2d 357, 385 (D. Me. 2003) ("The Joint DPS Policy was
16 issued as an official position of the agencies after both the proposed and final versions of
17 the policy were published in the Federal Register and the policy was subject to public
18 notice and comment.").

19 ⁷There is no need for interpretation of a statute that is unambiguous, and therefore
20 no deference is afforded to an agency's interpretation of an unambiguous statute. State of
21 Hawaii ex rel. Atty. Gen. v. Federal Emergency Mgmt. Agency, 294 F.3d 1152, 1158-59
(9th Cir. 2002) (citing Chevron, 467 U.S. at 842). The Court finds that "distinct
22 population segment" is an ambiguous term and therefore is subject to interpretation. See
23 Maine v. Norton, 257 F. Supp. 2d 357, 386 (D. Me. 2003) ("distinct population segment"
24 is not specifically defined [and therefore] [t]he statute [is] ambiguous").

25 ⁸For example, one scientist stated that "once a population can be considered a
26 distinct population segment, it qualifies as a 'species' under the ESA The ESA does
not give us the authority to determine how significant the 'species' is to the ecosystem
before we decide to list it." (DPS AR 219-20). Other comments cited by Plaintiffs are
similar.

1 1532(6) (emphasis added). “[W]here Congress has carefully employed a term in one
2 place and excluded it in another, it should not be implied where excluded.” Pena-
3 Cabanillas v. United States, 394 F.2d 785, 789 (9th Cir. 1968).

4 Defendants contend that the DPS Policy is a reasonable interpretation of an
5 ambiguous term. (Defendants’ Motion at 13). The significance criterion recognizes that
6 “populations commonly differ in their importance to the overall welfare of the species
7 they represent.” 61 Fed. Reg. at 4723. The significance inquiry therefore serves to focus
8 conservation efforts to “avoid[] important losses of genetic diversity.” Id. at 4724.

9 Defendants also contend that the significance factor serves to further congressional
10 intent that the DPS authority be exercised “sparingly.” (Defendants’ Motion at 16 (citing
11 61 Fed. Reg. at 4723)). In 1979 testimony before a Senate committee, General
12 Accounting Office (“GAO”) officials recommended that the “distinct population
13 segment” language be amended to prevent the Services from listing “geographically
14 limited populations.” S. Rep. No. 96-151, at 6 (1979) (DPS AR 6). Congress did not
15 narrow the “species” definition as recommended by GAO. However, the Senate
16 committee noted that it “is aware of the great potential for abuse of this [listing] authority
17 and expects the FWS to use the ability to list populations sparingly and only when the
18 biological evidence indicates that such action is warranted.” Id. at 7. Because this report
19 was issued by Congress after the 1978 amendment that added the “distinct population
20 segment” element to the species definition, it is subsequent legislative history and
21 therefore “is less illuminating than contemporaneous evidence.” Hagen v. Utah, 510 U.S.
22 399, 420 (1994); see also United States v. Price, 361 U.S. 304, 313 (1960) (“views of a
23 subsequent Congress form a hazardous basis for inferring the intent of an earlier one”).

24 Because the “views of a subsequent Congress form a hazardous basis for inferring
25

1 the intent of an earlier one,” the Court does not find that one Senate committee’s
2 expectation that the Services only “sparingly” employ their ability to list populations
3 supports the argument that a prior Congress intended the Services to use the DPS
4 authority “sparingly.” However, the Court finds that it is not contrary to clear
5 congressional intent for the Services to consider the significance of a distinct population
6 segment when determining whether that population is entitled to ESA listing. As noted,
7 *supra*, the term “distinct population segment” is ambiguous. As the Services concluded
8 when promulgating the DPS Policy, a DPS must be both discrete and significant because
9 “[t]he interests of conserving genetic diversity would not be well served by efforts
10 directed at either well-defined but insignificant units or entities believed to be significant
11 but around which boundaries cannot be recognized.” 61 Fed. Reg. at 4725. The Court
12 therefore finds that the DPS Policy is not contrary to congressional intent regarding the
13 ESA and that it is a reasonable interpretation of an ambiguous term.⁹

14 **3. Did NMFS Err in Considering the Southern Residents with Reference**
15 **to the Global Species *Orcinus Orca*?**

16 Plaintiffs also contend that Defendants’ “not warranted” decision should be set
17 aside because NMFS failed to base its listing decision on the best available scientific data.
18 Specifically, Plaintiffs argue that NMFS relied upon the outdated and discredited global
19 *Orcinus orca* taxon when evaluating the significance of the Southern Residents.

20 The ESA provides that an agency must make its listing determination “solely on
21

22 ⁹See also National Ass’n of Home Builders v. Norton, 340 F.3d 835 (9th Cir.
23 2003) (determining that FWS did not properly apply DPS Policy in listing population of
24 pygmy owls, though challenge to DPS Policy was not before the court); Maine v. Norton,
25 257 F. Supp. 2d 357, 387 (D. Me. 2003) (“the Joint DPS Policy was a reasonable
interpretation of ambiguous statutory language”).

1 the basis of the best scientific and commercial data available.” 16 U.S.C. §
2 1533(b)(1)(A). Reliance upon the best available scientific data, as opposed to requiring
3 absolute scientific certainty, “is in keeping with congressional intent” that an agency
4 “take preventive measures *before* a species is ‘conclusively’ headed for extinction.”
5 Defenders of Wildlife v. Babbitt, 958 F. Supp. 670, 679-80 (D.D.C. 1997) (emphasis in
6 original); see also American Wildlands v. Norton, 193 F. Supp. 2d 244, 251 (D.D.C.
7 2002) (same). However, when there is competing scientific data or expert opinions, a
8 court should defer to the agency’s technical expertise “even if, as an original matter, a
9 court might find contrary views more persuasive.” Marsh v. Oregon Natural Res.
10 Council, 490 U.S. 360, 378 (1989). An agency is not obliged to conduct independent
11 studies to improve upon the best available science or to resolve inconclusive aspects of
12 the scientific information. Southwest Center for Biological Diversity v. Babbitt, 215 F.3d
13 58, 61 (D.C. Cir. 2000) (“The District Court’s responsibility was to assess the evidence
14 and resolve the parties’ dispute. The court’s decision to sidestep this responsibility by
15 imposing an obligation upon the Secretary to find better data was error.”).

16 Plaintiffs argue that NMFS erred by relying upon science it knows is inaccurate.
17 As noted, *supra*, the BRT unanimously agreed that the global *Orcinus orca* taxon is
18 inaccurate. See AR 6 at xv; SAR 22 at 1 (BRT members unanimously agree that the
19 global taxon does not “accurately reflect the biology of the species [and that] more than
20 one species of killer whales exist globally”). Additionally, the BRT unanimously agreed
21 that transient and resident killer whales in the North Pacific belong to two different taxa.
22 See AR 6 at 53; SAR 23 at 2 (BRT members unanimously agree that “[b]ased on ecology,
23 morphology and genetics . . . transient and resident killer whales in the North Pacific
24 belong in two different taxa”). In its listing determination NMFS recognized the BRT’s
25

1 conclusion that the global *Orcinus orca* taxon is inaccurate. See 67 Fed. Reg. at 44,136-
2 37.

3 Despite the BRT's conclusion that the global taxon is inaccurate and NMFS's
4 acknowledgment of that criticism, NMFS based its listing decision on the global *Orcinus*
5 *orca* taxon. NMFS stated that it "considers the published standard of a single, global
6 species as the best available scientific information." Id. at 44,138. NMFS also stated that
7 "classifying the Southern Resident killer whales into a particular distinct population
8 segment cannot be resolved until the taxonomic structure of *O. orca* is clarified." Id.

9 Defendants contend that the decision to rely upon the global *Orcinus orca* taxon
10 was correct by arguing that because uncertainty exists in the field of taxonomy, it should
11 rely upon the single global taxon. See Defendants' Motion and Response at 21-24.
12 NMFS acknowledges that the global taxon has undergone a high degree of scrutiny and
13 that a number of taxonomists have proposed that the single taxon be broken down into
14 several smaller taxa, "[h]owever, none of these proposals has been subjected to the
15 examination and debate that should occur within the scientific community before a new
16 taxon, if any, is recognized." Id. at 21 (citing 67 Fed. Reg. at 44,138). Defendants note
17 that eventual consensus on reclassification of the killer whales "is further complicated
18 [and therefore likely to be delayed] by the fact that individual taxonomists may be more
19 reluctant than others in identifying new taxa." Id. NMFS contends that "in the absence
20 of *consensus* within the scientific community [regarding the proper reclassification of
21 killer whales], NMFS reasonably concluded that the single, global species is the best
22 available scientific information." Id. (emphasis added).

23 The record before the Court is replete with compelling evidence that the global
24 *Orcinus orca* taxon is inaccurate and therefore does not constitute the best available
25

1 scientific information. As previously noted, the BRT convened by NMFS unanimously
2 concluded that the global taxon is incorrect and that resident and transient whales belong
3 in two different taxa. The BRT included a detailed summary of the reasons for these
4 conclusions:

5 Resident and Transient killer whales . . . have striking genetic differences
6 (see Sections 2.2.2 and 2.2.3). These differences indicate reproductive
7 isolation on an evolutionary scale of these [sic, these] two ecotypes of killer
8 whales, *which is the fundamental criterion for defining species under the*
9 *Biological Species Concept* (Mayr, 1963). At mtDNA loci, Residents and
10 Transients are differentiated by six fixed base pair differences. This
11 difference is similar in magnitude to some differences observed in several
12 other pairs of marine mammal species and greater than some. For example,
13 there is only one fixed base pair difference between short-beaked common
14 dolphins (*Delphinus delphis*) and long-beaked common dolphins
15 (*Delphinus capensis*), albeit within a shorter segment of the control region
16 (Heyning and Perrin, 1994). At nuclear loci, genetic differences between
Residents and Transients are greater than differences between the most
geographically distant pair of Resident populations that have been
compared for microsatellite diversity (Southern Residents vs. Southern
Alaska Residents; see Section 2.2.2). These differences are evidence of
reproductive isolation on an evolutionary scale between both male and
female Residents and Transients. In addition—and perhaps more
importantly—*Residents and Transients have different diets and different*
external morphology. This suggests that if Residents were extirpated,
Transients might not fill the vacant ecological niche left open in an
ecological timeframe.

17 (AR 6 at 53 (emphases added)). As noted by the BRT, “formal taxonomic changes are
18 often slow to occur and *lag behind current knowledge*.” (AR 6 at x (emphasis added)).

19 The BRT explained:

20 The uncertainty surrounding killer whale taxonomy is characteristic of
21 marine mammals. Nomenclature has not caught up with knowledge
22 (particularly genetic information), due to the difficult and time-consuming
23 traditional process of obtaining and classifying skulls needed to formally
24 describe what many scientists recognize as discrete taxonomic entities.
Subspecies have only been named for a small number of marine mammal
species. For example, the dwarf minke whale is referenced by Rice (1998)
as an “unnamed subspecies.” “Forms”, “ecotypes” and “races” are all terms
that can be used to describe populations or groups of populations that will
likely be designated formal species or subspecies sometime in the future.

1 (AR 6 at 54). Similarly, one BRT white paper stated that “[i]t is simply a technicality that
2 there remains a single species of killer whale: the taxonomy does not reflect the current
3 state of knowledge.” (SAR 13 at 6).

4 NMFS appears to rely upon the difficulty establishing formal taxonomic changes
5 for its decision to credit the single global *Orcinus orca* taxon. Defendants note that “the
6 BRT’s internal deliberations emphasize[] the lack of consensus with respect to the
7 recognition of any taxon narrower than the single, global taxon.” (Defendants’ Motion
8 and Response at 23 (citing SAR 23 at 2)).¹⁰ Defendants also point out that the BRT
9 recognized that taxonomic reclassification of the killer whales “is likely to be . . .
10 controversial” and that “[f]urther clarification is needed by taxonomists.” (AR 6 at 54).
11 Finally, Defendants argue that NMFS’s reliance upon the global *Orcinus orca* taxon is
12 consistent with agency regulations regarding the role of taxonomy in determining whether
13 a population constitutes a species under the ESA. See Defendants’ Reply at 11 (citing 50
14 C.F.R. § 424.11(a)).

15 Turning first to NMFS’s last defense, 50 C.F.R. § 424.11(a) provides in relevant
16 part that “[i]n determining whether a particular taxon or population is a species for the
17 purposes of the Act, the Secretary shall rely on standard taxonomic distinctions and the
18

19 ¹⁰The internal deliberations to which NMFS refers consisted of an exercise in
20 which BRT members could distribute a total of 100 possible points “to choose among the
21 possible taxa to which southern resident killer whales might belong.” (SAR 23 at 2).
22 This method was designed to “quantify uncertainty within members of the BRT.” (SAR
23 18 at 1). These deliberations demonstrated that the BRT members were uncertain
24 regarding the possible taxa to which the Southern Residents might belong. However, this
25 uncertainty in no way alters the BRT’s conclusions that the global *Orcinus orca* taxon is
26 inaccurate and that residents and transients do not belong to the same taxon, or the
virtually uncontroverted evidence before the Court in support of those two conclusions.

1 biological expertise of the Department and the scientific community concerning the
2 relevant taxonomic group.” This regulation supports Plaintiffs’ argument that NMFS’s
3 reliance upon the global taxon is misplaced. As recited in the preceding paragraphs, “the
4 biological expertise of the Department and the scientific community” demonstrates that
5 the standard taxonomic distinction is inaccurate. Defendants have little to rely upon aside
6 from the fact that the standard taxonomy concerning killer whales does not yet reflect
7 what is known from other scientific fields. When the best available science indicates that
8 the “standard taxonomic distinctions” are wrong, pursuant to ESA mandate NMFS must
9 apply that best available science.

10 Defendants repeatedly note that changes in taxonomic classification are time
11 consuming, slow, and may be controversial. That formal taxonomic reclassification of
12 killer whales may be controversial is in large measure due to the difficulties inherent in
13 the field of taxonomy. For example, the record contains materials regarding a proposal by
14 two Russian scientists to classify small fish-eating killer whales in the Antarctic ice pack
15 as a new species “based on differences in body size, coloration, skull morphology
16 (including numbers of teeth), reproductive differences, and dietary differences (fish vs.
17 mammals).” (AR 6 at 53). However, genetic evidence was not available for the putative
18 species.¹¹ Id. The BRT noted that an authority on killer whale taxonomy did not accept
19 the new species, “citing the need for more analysis of skull morphology.” Id. “Because
20 collecting skulls of killer whales is difficult, accumulating the evidence needed to
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22 ¹¹Unlike the evidence regarding the Antarctic killer whales, here considerable
23 genetic information exists regarding resident and transient orcas, which indicates there is
24 a significant difference between the two orca forms. This genetic information was
25 important evidence for the BRT’s conclusion that the residents and transients do not
26 belong to the same taxon. See AR 6 at 53.

1 formally describe the putative new species in Antarctica may take years.” Id.

2 Just as collecting the skulls of killer whales in Antarctica is problematic, gathering
3 a sufficient number of resident orca and transient orca skulls is likely to be difficult.
4 Given those difficulties, it is unlikely that a taxonomist who insists upon skull
5 comparisons prior to breaking down the global *Orcinus orca* taxon will reach such a
6 conclusion in the foreseeable future. Given the considerable morphological, behavioral,
7 and genetic evidence that the global *Orcinus orca* taxon is inaccurate and that residents
8 and transients do not belong to the same taxon, the decision not to list the Southern
9 Residents cannot be based upon a lack of consensus in the field of taxonomy regarding
10 the precise, formal taxonomic redefinition of killer whales, particularly when that lack of
11 agreement is compounded by the extreme difficulty in gathering evidence to achieve
12 consensus. The best available science standard gives “the benefit of the doubt to the
13 species.” Connor v. Burford, 848 F.2d 1441, 1454 (9th Cir. 1988) (observing one of the
14 purposes of the best available science standard in review of whether agency action may
15 result in destruction or adverse modification of listed species’ habitat pursuant to 16
16 U.S.C. § 1536(a)(2)). To deny listing of a species simply because one scientific field has
17 not caught up with the knowledge in other fields does not give the benefit of the doubt to
18 the species and fails to meet the best available science requirement.¹²

19
20 ¹²In the listing decision NMFS stated that it would reconsider the taxonomy of
21 killer whales within four years and that “[i]f the species *O. orca* has been subdivided in a
22 manner that may allow Southern Resident killer whales to be identified as a DPS,” NMFS
23 will reconvene a BRT for ESA review. 67 Fed. Reg. at 44,138. Due to the problems
24 inherent in taxonomic reclassification demonstrated in the record and acknowledged by
25 all parties, that NMFS plans to re-examine this issue should the global *Orcinus orca*
taxon be subdivided is not consistent with congressional intent that an agency “take
preventive measures *before* a species is ‘conclusively’ headed for extinction.” Defenders
of Wildlife, 958 F. Supp. at 679-80 (emphasis in original).

1 A court must defer to an agency's expertise. However, such deference is
2 warranted only when the agency utilizes, rather than ignores, the analysis of its experts.
3 Northern Spotted Owl v. Hodel, 716 F. Supp. 479, 483 (W.D. Wash. 1988). Here NMFS
4 ignored its experts' conclusions that the global taxon is inaccurate and that the best
5 available science demonstrates that resident and transient killer whales do not belong to
6 the same taxon. For all of the foregoing reasons, the Court finds that NMFS erred in
7 considering the Southern Residents with reference to the global species *Orcinus orca*.¹³

8 **4. Effects of NMFS's Failure to Utilize Best Available Science.**

9 When determining whether the Southern Residents are significant under the DPS
10 Policy, NMFS utilized the global *Orcinus orca* taxon and did not consider the best
11 available science indicating that resident and transient killer whales do not belong to the
12 same taxon. This error likely affected whether the significance determination was
13 correct.

14 **a. Significant Gap in Orcas' Range.**

15 The DPS Policy provides that the significance inquiry includes consideration of the
16 "[e]vidence that loss of the discrete population segment would result in a significant gap
17 in the range of the taxon." 61 Fed. Reg. at 4725. In its listing decision NMFS offered
18 two reasons that the loss of the Southern Residents would not result in a significant gap in
19 the range of the taxon:

20
21 ¹³At oral argument Defendants' counsel argued that because an agency may not be
22 ordered to "create new science," NMFS is "not required to revise [the] taxon."
23 (Transcript at 42). An agency is not obliged to conduct independent scientific studies.
24 Southwest Center for Biological Diversity, 215 F.3d at 61. However, the Court is not
25 ordering NMFS to create new science and revise the taxon. Rather, NMFS must make
the listing decision without reliance upon science that its own scientists unanimously
agreed is inaccurate.

1 Because Transient killer whales are known to occupy the same range as
2 Southern Resident killer whales and because Offshore killer whales may
3 occupy a portion of the same range as Southern Resident killer whales,
4 extinction of Southern Resident killer whales might not result in a gap in
the range of the taxon. In addition, other Resident or Offshore animals
could re-colonize the current range of Southern Residents should that
population be extirpated.

5 67 Fed. Reg. at 44,137.

6 NMFS's reliance on the inaccurate global taxon likely caused the agency to
7 erroneously evaluate this element of the significance factor. Because NMFS considered
8 residents and transients to belong to the same taxon, NMFS relied upon the presence of
9 transients in the Southern Residents' range for its conclusion that extirpation of the
10 Southern Residents would not result in a significant gap in the range of the taxon. When,
11 as the best available science indicates, residents and transients are recognized as
12 belonging to separate taxa, the presence of transients in the Southern Residents' range
13 does nothing to prevent a gap in the range of the Southern Residents' taxon should that
14 population be extirpated. Additionally, there appears to be no indication in the record that
15 offshore killer whales are present in the Southern Residents' range for any appreciable
16 time.

17 NMFS's speculation that should the Southern Residents be extirpated, other
18 resident or offshore killer whales might repopulate the Southern Residents' range finds no
19 support in the record. The BRT noted that "the inland waterway habitat has been re-
20 colonized by Residents after ice age coverage in the past[, however] there are no data to
21 evaluate whether other Resident or Offshore animals might re-colonize" the Southern
22 Residents' current range should that population be extirpated. (AR 6 at 61).

23 Additionally, the BRT recognized several examples "where local extirpations [of whales]
24 by over-harvest have not yet experienced re-colonization despite healthy neighboring
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1 populations.” (AR 6 at 55). As an example the BRT cited the extirpation of beluga
2 whales from an estuary in the Eastern Hudson Bay over a century and a half ago. Id.
3 Despite the presence of other nearby populations of beluga whales, the estuary has not
4 been repopulated. Id. at 56. One study considered by the BRT noted that “when
5 subpopulations of whales within relatively small geographic areas are extirpated or
6 greatly reduced, no repopulation of the area occurs by immigration from adjacent
7 populations,” despite the fact that the extirpations occurred between forty years and
8 several centuries ago. (AR 167 (Phillip J. Clapham and Leila T. Hatch, Determining
9 Spatial and Temporal Scales for Population Management Unites: Lessons from Whaling
10 (2002)) at 6). On the basis of this evidence the BRT concluded that “the prospect of re-
11 colonization of the full range of Southern Residents by other Residents is unknown, but
12 may be remote based on comparisons with other cetaceans.” (AR 6 at 56).

13 Because repopulation of the Southern Residents’ range is not supported by the
14 available science, NMFS erred to the extent that it based its significance finding on the
15 possibility that other residents or offshore orcas would repopulate the range of the
16 Southern Residents should they be extirpated. Cf. Anderson v. Evans, 314 F.3d 1006,
17 1020 (9th Cir. 2002) (“the scientific uncertainty is at its apogee” regarding “whether
18 whales who heretofore have not visited the [Olympic Coast National Marine Sanctuary
19 and the Strait of Juan de Fuca] will do so” and therefore the Government’s reliance upon
20 such possible migration is impermissible).

21 **b. Genetic Characteristics.**

22 The DPS Policy provides that when determining whether a population is
23 significant, the Services should consider “[e]vidence that the discrete population segment
24 differs markedly from other populations of the species in its genetic characteristics.” 61
25

1 Fed. Reg. at 4725. NMFS noted that the BRT “found that the differences between
2 Southern Residents and Resident pods in Canada and Alaska were small compared to
3 genetic differences between Resident and Transient killer whale stocks.” 67 Fed. Reg. at
4 44,137. On that basis NMFS concluded that “the Southern Resident killer whale stock
5 does not have markedly different genetic characteristics.” Id.

6 The problem with NMFS’s analysis and conclusion is obvious. Because the best
7 available scientific information demonstrates that the residents and transients do not
8 belong to the same taxon, that the genetic differences between the Southern Residents and
9 other residents are small relative to the differences between the residents and transients
10 has no bearing on whether the Southern Residents’ genetic characteristics differ markedly
11 from those of other populations of the species to which they belong.

12 The BRT described the Southern Residents as “the group that differs the most in
13 nuclear DNA from all other groups.” (AR 6 at 56). Additionally, the record indicates
14 that certain distinct species of marine mammals have genetic differences comparable to
15 the differences between the Southern and Northern Residents. See SAR 13 at 6-7.
16 However, rather than determining that the Southern Residents differ markedly from other
17 populations in genetic characteristics on the basis of this evidence, the Court finds it
18 appropriate to remand this inquiry to NMFS for redetermination, absent the improper
19 reference to the transient killer whales.

20 **5. Unique Social Structure, Language, and Customs.**

21 Plaintiffs argue that NMFS failed to consider the Southern Residents’ unique
22 social structure, language, rituals, behaviors, and knowledge in making the DPS
23 significance determination. (Plaintiffs’ Motion at 34). The Court recognizes the striking
24 evidence that the Southern Residents, like other orca populations, have a unique social
25

1 structure, language, rituals, behaviors, and knowledge. See AR 6 at 62; AR 34 at 15, AR
2 313 at 28-29, AR 194 at 96. Additionally, the DPS Policy provides that the four
3 enumerated factors of the significance inquiry are not the only factors “that might bear on
4 the biological and ecological importance of a discrete population segment.” 61 Fed. Reg.
5 at 4725.

6 Both the BRT and NMFS found that the listed criteria were sufficient to evaluate
7 the population’s significance with reference to the global *Orcinus orca* taxon. See AR 6
8 at 60-62; 67 Fed. Reg. at 44,138. However, evaluation of the population’s significance
9 with reference to the global *Orcinus orca* taxon was improper. See Section III.B.3, supra.
10 The Court therefore cannot determine whether, when considered without improper
11 reference to that inaccurate taxon, the Southern Residents’ unique social structure,
12 language, rituals, behaviors, and knowledge should be considered for the significance
13 factor of the DPS inquiry.

14 On remand NMFS should determine whether the four listed criteria are sufficient
15 to evaluate whether the Southern Residents are significant, or rather whether the
16 population’s social structure, language, rituals, behaviors, and knowledge should also be
17 considered in the significance inquiry. However, due to the high degree of deference
18 owed to the agency, the Court begins with the presumption that the agency’s action is
19 valid. Associated Fisheries of Maine, Inc. v. Daley, 127 F.3d 104, 109 (1st Cir. 1997).
20 Although the Court does not resolve the question here, the Court observes that, unlike
21 NMFS’s failure to rely upon the best available science, the present record appears not to
22 support the conclusion that Defendants’ decision to utilize only the four listed
23 significance criteria was arbitrary and capricious.

1 **6. Did NMFS Err by not Considering Whether Orcas are Threatened or**
2 **Endangered Over a Significant Portion of Their Range?**

3 Plaintiffs contend that NMFS erred in failing to consider whether killer whales are
4 in danger of extinction throughout a significant portion of their range. See Plaintiffs'
5 Motion at 23-27; Plaintiffs' Response and Reply at 23-26. The ESA defines a species
6 (including a subspecies or a DPS) to be endangered if it is "in danger of extinction
7 throughout all or a significant portion of its range." 16 U.S.C. § 1532(6).

8 Defendants argue that NMFS did not consider whether killer whales are
9 endangered in a significant portion of their range because "plaintiffs' petition to list the
10 Southern Residents itself *never asked* NMFS" to make such a determination.
11 (Defendants' Motion and Response at 32 (emphasis in original)). Additionally,
12 Defendants note that "NMFS engaged in an extensive examination of the relationship of
13 Southern Residents to the worldwide taxon and other aggregations of killer whales . . .
14 [and] concluded that the loss of the Southern Residents would not result in a significant
15 gap in the range of the taxon . . . [because] Transients overlapped in their range with
16 Residents." Id. at 34.

17 Plaintiffs cite numerous examples of the Services' practice of reaching beyond the
18 grounds presented in listing petitions when making listing determinations. See 58 Fed.
19 Reg. 29,390, 29,392 (May 20, 1993) (reviewing coastal steelhead populations in
20 California, Oregon, and Washington in response to petition to list Illinois River winter
21 steelhead in Oregon); 59 Fed. Reg. 21,744, 21,756 (Apr. 26, 1994) (status review
22 broadened beyond coho salmon in Scott and Waddell Creeks, California); 59 Fed. Reg.
23 59,981, 59,983 (Nov. 21, 1994) (status review broadened beyond Deer Creek summer
24 steelhead petition); 60 Fed. Reg. 51,928, 51,932 (Oct. 4, 1995) (status review broadened
25

1 beyond Elwha and Dungeness River pink salmon petition); 66 Fed. Reg. 17,659, 17,665,
2 17,668 (Apr. 3, 2001) (listing review broadened beyond particular population of pacific
3 herring); 65 Fed. Reg. 70,514, 70,520-21 (Nov. 24, 2000) (listing review broadened
4 beyond particular stocks of pacific hake, pacific cod, and walleye pollock).

5 The ESA mandates that in response to a listing petition the Services must conduct
6 a "review of the status of the species concerned" on the basis of the best available
7 science. 16 U.S.C. § 1533(b)(1)(A). On remand, NMFS should consider whether the
8 species to which the Southern Residents belong is in danger of extinction in a significant
9 portion of its range. See Defenders of Wildlife v. Norton, 258 F.3d 1136, 1146 (9th Cir.
10 2001) (remanding matter to the Secretary of the Interior for determination of whether flat-
11 tailed horned lizard was extinct in a significant portion of its range). The Court
12 recognizes that this task is made difficult because there is no consensus regarding the
13 precise delineation of the species to which the Southern Residents belong. However, the
14 best available science demonstrates that the residents and transients do not belong to the
15 same taxon of killer whales. For reasons already discussed, NMFS may not rely upon the
16 periodic presence of transients in the range of residents to determine that the species of
17 orcas to which the Southern Residents belong is not at risk of extinction in a significant
18 portion of its range.¹⁴ See Section III.B.3, supra.

19 IV. CONCLUSION

20 For the foregoing reasons the Court GRANTS IN PART and DENIES IN PART
21 Plaintiffs' motion for summary judgment (Dkt. # 29) and Defendants' motion for
22

23 ¹⁴The Court expresses no opinion at this point regarding whether the Southern
24 Residents' range constitutes a significant portion of the range of the species to which the
25 Southern Residents belong.

1 summary judgment (Dkt. # 41). The Court SETS ASIDE Defendants' "not warranted"
2 finding. The Court REMANDS this matter to NMFS for determination, in accordance
3 with the findings and legal standards set forth in this Order, of whether the Southern
4 Residents should be listed pursuant to the ESA. NMFS is ordered to issue a new finding
5 within twelve months of the date of this Order. The Court STAYS these proceedings
6 pending issuance of NMFS's new listing decision. The parties are directed to file a joint
7 status report regarding the status of this litigation within 90 days of issuance of NMFS's
8 new listing decision.

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11 DATED this 17th day of December, 2003.

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14 Robert S. Lasnik
15 United States District Judge
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